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Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/726,645-Conf. #6181
				Filing Date	December 4, 2003
				First Named Inventor	Gregg A. Hastings
				Art Unit	1644
				Examiner Name	Belyavskiy, Michail A
Sheet	1	of	5	Attorney Docket Number	PF107D6

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	US-5,552,281	09-03-1996	STASHENKO, et al.	
	AB	US-5,223,408	06-29-1993	GOEDDEL, et al.	
	AC	US-5,501,969	03-26-1996	HASTINGS	
	AD	US-5,486,623	01-23-1996	ZIMMERMAN, et al.	
	AE	US-5,374,623	12-20-1994	ZIMMERMAN, et al.	
	AF	US-5,312,816	05-17-1994	SPIELVOGEL, et al.	
	AG	US-5,736,357	04-07-1998	BROMME	
	AH	US-5,624,801	04-29-1997	STASHENKO, et al.	
	AI	US-5,656,728	08-12-1997	STASHENKO, et al.	

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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	AJ	EP-0 104 920	04-04-1984	BIOGEN, INC.		
	AK	EP-0 110,674	04-22-1987	DAI NIPPON INSATSU KABUSHIKI KAISHA		
	AL	EP-0 111 129	09-28-1998	IBM CORP.		
	AM	EP-0 504 938	09-23-1992	SUNTORY, LTD.		
	AN	EP-0 520 427	12-14-1994	MITSUBISHI KAISA CORP.		
	AO	EP-0 525,420	05-12-1999	MITSUBISHI CHEM. CORP.		
	AP	WO-91/01378	02-07-1991	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE		
	AQ	WO-94/23033	10-13-1994	FORSYTH DENTAL INFIRMARY FOR CHILDREN		
	AR	WO-95/24182	09-14-1995	HUMAN GENOME SCIENCES, INC.		
	AS	WO-96/13523	05-09-1996	KHEPRI PHARMACEUTICALS, INC.		
	AT	WO-97/35971	10-02-1997	AMRAD OPERATIONS PTY., LTD.		
	AU	WO-97/47642	12-18-1997	SMITHKLINE BEECHAM CORP.; HUMAN GENOME SCIENCES, INC.		
	AV	WO-98/00716	01-08-1998	NOVADX, INC.		
	AW	WO-98/03651	01-29-1998	FORSYTH DENTAL INFIRMARY FOR CHILDREN		
	AX	WO-98/08494	01-29-1998	MOUNT SINAI SCHOOL OF MEDICINE OF THE CITY UNIVERSITY OF NEW YORK; BRIGHAM & WOMEN'S HOSPITAL		
	AY	WO-98/20024	05-14-1998	MERCK FROSST CANADA, INC.		

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Sheet	2	of	5	Attorney Docket Number	PF107D6

	AZ	WO-98/20156	05-14-1998	MERCK FROSST CANADA, INC.		
	BA	WO-98/34117	08-06-1998	THE UNIVERSITY OF LIVERPOOL		

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NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
	BB	BARRETT, et al., "L-trans-Epoxysuccinyl-leucylamido(4-guanidino)butane (E-64) and its analogues as inhibitors of cysteine proteinases including cathepsins B, H and L," <i>Biochem. J.</i> , 201:189 (1982)		
	BC	BOSSARD, et al., "Proteolytic activity of human osteoclast cathepsin K," <i>J. Biol. Chem.</i> , 271:12517-12524 (1996)		
	BD	BROMME, et al., "Human cathepsin 02, a novel cysteine protease highly expressed in osteoclastomas and ovary molecular cloning, sequencing and tissue distribution," <i>J. Biol. Chem.</i> , 376(6):379-384 (1995)		
	BE	BROMME, et al., "Peptide methyl ketones as reversible inhibitors of cysteine proteinases," <i>J. Enzyme Inhibition</i> , 3:13-21 (1989)		
	BF	BROMME, et al., "Functional expression of human cathepsin S in <i>Saccharomyces cerevisiae</i> ," <i>J. Biol. Chem.</i> , 268:4832-4838 (1993)		
	BG	BROMME, et al., "Potent inactivation of cathepsins S and L by peptidyl (Acyloxy)methyl ketones <sup>a,b</sup> ," <i>J. Biol. Chem.</i> , 375:343-347 (1994)		
	BH	BROMME, et al., "Peptide vinyl sulphones: a new class of potent and selective cysteine protease inhibitors," <i>Biochem. J.</i> , 315:85-89 (1996)		
	BI	BROMME, et al., "Human cathepsin 02, a matrix protein-degrading cysteine protease expressed in osteoclasts," <i>J. Biol. Chem.</i> , 271:2126-2132 (1996)		
	BJ	BROWN, et al., "Lymphopain, a cytotoxic T and natural killer cell-associated cysteine proteinase," <i>Leukemia</i> , 12:1771-1781 (1998)		
	BK	CARMONA, et al., "Potency and selectivity of the cathepsin L propeptide as an inhibitor of cysteine proteases," <i>Biochem. J.</i> , 35:8149-8157 (1996)		
	BL	CHAGAS, et al., "Inhibition of cathepsin B by its propeptide: use of overlapping peptides to identify a critical segment," <i>FEBS LETTS.</i> , 392:233-236 (1996)		
	BM	CYGLER, et al., "Proregion structure of members of the papain superfamily. Mode of inhibition of enzymatic activity," <i>Biochemie</i> , 79:645-652 (1997)		
	BN	CYGLER, et al., "Structure of rat procathepsin B: mode for inhibition of cysteine protease activity by the proregion structure," <i>Structure</i> , 4:405-416 (1996)		
	BO	D'ALESSIO, et al., "Expression in <i>Escherichia coli</i> , refolding, and purification of human procathepsin K, an osteoclast-specific protease," <i>Protein Expression and Purification</i> , 15:213-220 (1999)		
	BP	DELAISSE, et al., "Inhibition of bone resorption in culture by inhibitors of thiol proteinases," <i>J. Biochem.</i> , 192:365-368 (1980)		
	BQ	DELAISSE, et al., "In vivo and in vitro evidence for the involvement of cysteine proteinases in bone resorption," <i>Biochem. Biophys. Res. Comm.</i> , 125:441-447 (1984)		

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BR	DELAISSE, et al., "The effects of inhibitors of cysteine - proteinases and collagenase on the resorptive activity of isolated osteoclasts," <i>Bone</i> , 8:305-313 (1987)	
BS	DELAISSE, et al., "Collagenolytic cysteine proteinases of bone tissue," <i>Biochem. J.</i> , 279:167-174 (1991)	
BT	DRAKE, et al., "Identification of a novel osteoclast selective human cysteine proteinase," <i>J. Bone Mineral Research</i> , 9:5177 (A110) (1994)	
BU	DRAKE, et al., "Cathepsin K, but not Cathepsins B, L, or S, is abundantly expressed in human osteoclasts," <i>J. Biol. Chem.</i> , 271:12511-12516 (1996)	
BV	DUFFY, et al., "Design and synthesis of diaminopyrrolidinone inhibitors of human osteoclast cathepsin K," <i>Bioorganic &amp; Medicinal Chemistry</i> , 9:1907-1910 (1999)	
BW	FOX, et al., "Potent slow-binding inhibition of cathepsin B by its propeptide," <i>Biochem. J.</i> , 31:12571-12576 (1992)	
BX	GELB, et al., "Pycnodysostosis, a lysosomal disease caused by cathepsin K deficiency," <i>Science</i> , 273:1236-1238 (1996)	
BY	GELB, et al., "Structure and chromosomal assignment of the human cathepsin K Gene," <i>Genomics</i> , 41:258-262 (1997)	
BZ	GELB, et al., "Cathepsin K: isolation and characterization of the murine cDNA and genomic sequence, the homolog of the human pycnodysostosis gene," <i>Biochem. and Mol. Med.</i> , 59:200-206 (1996)	
CA	GOTO, et al., "Immunohistochemical localization of cathepsins B, D and L in the rat osteoclast," <i>Histochemistry</i> , 99:411-414 (1993)	
CB	GOTO, et al., "Localization of cathepsins B, D, and L in the rat osteoclast by immuno-light and -electron microscopy," <i>Histochemistry</i> , 101:33-40 (1994)	
CC	GUAY, et al., "Cloning and expression of Rhesus Monkey cathepsin K," <i>Bone</i> , 25:204-209 (1999)	
CD	HILL, et al., "Inhibition of bone resorption by selective inactivators of cysteine proteinases," <i>J. Cell Biochem.</i> , 56:118-130 (1994)	
CE	HUDECKI, et al., "Limited benefit to genetically dystrophic chickens from a synthetic proteinase inhibitor: Ep475," <i>Chemical Abstracts.</i> , 99:82493u (1983)	
CF	HUDECKI, et al., "Limited benefit to genetically dystrophic chickens from a synthetic proteinase inhibitor: Ep475," <i>J. Neurol. Sci.</i> , 60:55-66 (1983)	
CG	INAOKA, et al., "Molecular cloning of human cDNA for cathepsin K: novel cysteine proteinase predominantly expressed in bone," <i>Biochem. &amp; Biophys. Res. Comm.</i> , 206(1):89-96 (1995)	
CH	JAMES, et al., "Development and characterization of a human in vitro resorption assay: demonstration of utility using novel antiresorptive agents," <i>J. Bone &amp; Mineral Research</i> , 14:1562-1569 (1999)	
CI	KAKEGAWA, et al., "Participation of cathepsin L on bone resorption," <i>FEBS LETTS.</i> , 321:247-250 (1993)	
CJ	KANE, et al., "The role of cathepsin L in malignant transformation," <i>Seminars in Cancer Biol.</i> , 1:127-136 (1990)	
CK	LALONDE, et al., "The crystal structure of human procathepsin K," <i>Biochem.</i> , 38:862-869 (1999)	
CL	LEE, et al., "Generation of cDNA probes directed by amino acid sequence: cloning of urate oxidase," <i>Science</i> , 239:1288-1291 (1988)	
CM	LEHNINGER, A., "Biochemistry" 2 <sup>nd</sup> ed.; Worth Publishers, Inc., New York, pp. 141 and 150 (1975)	
CN	LERNER, et al., "Human cystatin C, a cysteine proteinase inhibitor, inhibits bone resorption in vitro stimulated by a parathyroid hormone and parathyroid hormone related peptide of malignancy," <i>J. Bone &amp; Mineral Research</i> , 4:433-439 (1992)	
CO	LERNER, R.A., "Tapping the immunological repertoire to produce antibodies of predetermined specificity," <i>Nature</i> , 299:592-596 (1982)	

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Sheet	4	of	5	Attorney Docket Number	PF107D6

CP	LI, et al., "Characterization of mouse cathepsin K gene, the gene promoter, and the gene expression," <i>J. Bone &amp; Mineral Research</i> , 14:487-499 (1992)	
CQ	LI, et al., "Cloning and complete coding sequence of a novel human cathepsin expressed in giant cells of osteoclastomas," <i>J. Bone &amp; Mineral Research</i> , 10:1197-1202 (1995)	
CR	LIAO, et al., "Cathepsins J and K: high molecular weight cysteine proteinases from human tissues," <i>Biochem. Biophys. Res. Comm.</i> , 124:909-916 (1984)	
CS	MACIEWICZ, et al., "A comparison of four cathepsins (B, L, N and S) with collagenolytic activity from rabbit spleen," <i>Biochem. J.</i> , 256:433-440 (1988)	
CT	MARQUIS, et al., "Potent dipeptidylketone inhibitors of the cysteine protease cathepsin K," <i>Bioorganic &amp; Medicinal Chemistry</i> , 7:581-588 (1999)	
CU	MAUBACH, et al., "The inhibition of cathepsin S by its propeptide specificity and mechanism of action," <i>Eur. J. of Biochem.</i> , 250:745-750 (1997)	
CV	McGRATH, et al., "Crystal structure of human cathepsin K complexed with a potent inhibitor," <i>Nature Structural Biol.</i> , 4:105-109 (1997)	
CQ	McQUENEY, et al., "Autocatalytic activation of human cathepsin K," <i>J. Biol. Chem.</i> , 272(21):13955-13960 (1997)	
CX	NAGLER, et al., "Human cathepsin X: a cysteine protease with unique carboxypeptidase activity," <i>Biochemistry</i> , 38(39):12648-12654 (1999)	
CY	OHSAWA, et al., "Lysosomal cysteine and aspartic proteinases, acid phosphatase, and an endogenous cysteine proteinase inhibitor, cystatin-beta, in rat osteoclasts," <i>J. Histochemistry &amp; Cytochemistry</i> , 41(7):1075-1083 (1993)	
CZ	PAGE, et al., "Purification and characterisation of cysteine proteinases from human osteoclastomas," <i>Biochem. Soc. Transactions</i> , 19:286S (1991)	
DA	RAKOACZY, et al., "Detection and possible functions of a cysteine protease involved in digestion of rod outer segments by retinal pigment epithelial cells," <i>Invest. Ophthalmol. &amp; Vis. Sci.</i> , 35:4100-4108 (1994)	
DB	SHI, et al., "Molecular cloning of human cathepsin O, a novel endoproteinase and homologue of rabbit OC2," <i>FEBS LETTS.</i> , 357:129-134 (1995)	
DC	SLOANE, et al., "Cathepsin B and cystatins: evidence for a role in cancer progression," <i>Seminars in Cancer Biol.</i> , 1:137-152 (1990)	
DD	SMITH, et al., "Activity and deletion analysis of recombinant human cathepsin L expressed in <i>Escherichia coli</i> ," <i>J. Biol. Chem.</i> , 264:20487-20495 (1989)	
DE	TEZUKA, et al., "Molecular cloning of a possible cysteine proteinase predominantly expressed in osteoclasts," <i>J. Biol. Chem.</i> , 269:1106-1109 (1994)	
DF	THOMPSON, et al., "Structure-based design of non-peptide, carbonylhydrazide-based cathepsin K inhibitors," <i>Bioorganic &amp; Medicinal Chemistry</i> , 7:599-605 (1999)	
DG	TURK, et al., "Structural and functional aspects of papain-like cysteine proteinases and their protein inhibitors," <i>Biol. Chem.</i> , 378:141-150 (1997)	
DH	VAN NOORDEN, et al., "Selective inhibition of cysteine proteinases by Z-Phe-A CH <sub>2</sub> F suppresses digestion of collagen by fibroblasts and osteoclasts," <i>Biochemical &amp; Biophysical Research Communications</i> , 178(1):178-184 (1991)	
DI	VEBER, et al., "The new partnership of genomics and chemistry for accelerated drug development," <i>Chem. Biol.</i> , 1:151-156 (1997)	
DJ	VELASCO, et al., "Human cathepsin O," <i>J. Biol. Chem.</i> , 43:27136-27142 (1994)	
DK	VOTTA, et al., "Peptide aldehyde inhibitors of cathepsin K inhibit bone resorption both in vitro and in vivo," <i>J. Bone &amp; Mineral Research</i> , 12:1396-1406 (1997)	
DL	WANG, et al., "Human cathepsin F," <i>J. Biol. Chem.</i> , 273:32000-32008 (1998)	
DM	WIEDERANDERS, et al., "Phylogenetic conservation of cysteine proteinases," <i>J. Biol. Chem.</i> , 267:13708-13713 (1992)	
DN	XIA, et al., "Localization of rat cathepsin K in osteoclasts and resorption pits: inhibition of bone resorption and cathepsin K-activity by peptidyl vinyl sulfones," <i>Biol. Chem.</i> , 380:679-687	
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		(1999)	
	DO	YAMAMOTO, et al., "Collagenolytic cathepsin B and L activity in experimental fibrotic liver and human liver," <i>Res. Comms. in Chemical Pathology and Pharmacology</i> , 76(1):95-112 (1992)	
	DP	ZHANG, et al., "Structure/activity analysis of human monocyte chemoattractant protein-1 (MCP-1) by mutagenesis," <i>J. Biol. Chem.</i> , 269(22):15918-15924 (1994)	

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